REMARKS/ARGUMENTS

35 USC §103(a)

Independent claim 1 is rejected under §103(a) over XP-002353310 to Petit et al. in view of Fellegara et al. (US 2001/015760), Ohmori (US 4,949,189), Shintani et al. (US 5,875,034), and Yamaki et al. (JP06-103358). Applicant respectfully traverses this rejection. The Examiner's consideration of the following arguments is respectfully sought.

Housing Defining Slot for Receiving Card

Claim 1 recites a housing defining a slot for receiving a printed instruction card. To reject this feature of claim 1, the Examiner construes the film chamber 98 of Fellegara et al. as corresponding to such a slot. Further, the Examiner contends that the surface of the film cartridge having encoded data printed thereon reads on the "card". Applicant respectfully believes that such a construction of Fellegara et al. goes beyond a broadest reasonable interpretation of the term "card".

With reference to the Merriam-Webster dictionary (http://www.m-w.com), the word "card" is defined as:

> *"a flat stiff usually small and rectangular piece of material (as paper, cardboard, or plastic) usually bearing information: as (1) : postcard (2) : visiting card (3) : business card (4) : credit card (5) : one bearing a picture (as of a baseball player) on one side and usually statistical data on the other (6) : one on which computer information is stored (as in the form of punched holes or magnetic encoding) (7) : one bearing electronic circuit components for insertion into a larger electronic device (as a computer)"*

Applicant respectfully submits that the surface of a film cartridge cannot reasonably be construed as a card, and would not be so construed by a person of ordinary skill in the art, particularly in light of the above dictionary definition. Moreover, Applicant believes that it is improper to only consider the surface of the film cartridge, and not the film cartridge as a whole. The fact is that the film cartridge as a whole is not a "card", and the top surface of the film cartridge is inseparably part of the film cartridge.

Accordingly, Applicant does not believe that Fellegara et al. prejudices the feature of claim 1 directed to a housing defining a slot for receiving a printed instruction card.

Linear Image Sensor Interface

In rejecting claim 1, the Examiner recognizes that Petit et al. fail to suggest a linear image sensor interface integrated on the one chip together with the VLIW processor and area image sensor interface. Therefore, the Examiner cites Fellegara et al. in alleged support of this feature.

The Examiner refers to unit 68 illustrated in Fig. 6 of Fellegara et al. Applicant points out, however, that unit 68 is not integrated on the one chip together with a VLIW processor nor an area image sensor interface, nor does the associated description of unit 68 suggest that such a unit would be so integrated on the one chip.

Input Buffer Connected to Area Image Sensor and Linear Image Sensor

Claim 1 recites an input buffer connected to both an area image sensor interface and a linear image sensor interface. In rejecting claim 1, the Examiner recognizes that the combination of Petit et al. and Fellegara et al. fail to suggest such a feature. However, the Examiner further cites Ohmori as allegedly teaching such a feature. Applicant respectfully disagrees.

Firstly, Applicant points out that element 4 illustrated in Fig. 1 of Ohmori refers to a switch. It would be clear to one of ordinary skill in the art that a switch is not a buffer. As described explicitly by Ohmori, the (analog) switch 4 merely selects as input either the line sensor 3A or the line sensor 3B. The switch 4 does not buffer data, as an input buffer would.

Secondly, Applicant points out that the switch 4 is in any case connected to two line (i.e. linear) sensors. Claim 1 requires the input buffer to be connected to an area image sensor and a linear image sensor. Ohmori, in illustrating a system where a switch is connected instead to two line (i.e. linear) sensors, does not teach or suggest the input buffer of claim 1 that is connected to an area image sensor and a linear image sensor.

Card Has Printed Thereon Dots Representing A Programming Script / One-Chip Microcontroller Decodes Data Signal into Programming Script

Claim 1 recites that the card has printed thereon an array of dots representing a programming script. The linear sensor converts the array of dots into a data signal, and the one-chip microcontroller decodes the data signal into the programming script. The Examiner

contends that such a feature is taught by Yamaki et al. Applicant respectfully disagrees for the following reasons.

Yamaki et al. teach that a sheet of paper being scanned is provided with a bar code. The bar code represents an identifier which in turn lets the scanner know how the sheet of paper should be scanned (for example, using OCR, or a simple binarized method).

Applicant points out that the bar code itself does not represent a programming script. Specifically, the data signal produced by a linear scanner scanning the barcode is not decoded into a programming script. Rather, the data signal produced by the linear scanner in scanning the barcode is decoded only into an identifier such as "OCR" , "Dither" or "Binarized". From the identifier, the system of Yamaki et al. decides what scanning method to use.

Claim 1 is specific as to the nature and relationship between the array of dots, the data signal, and the programming script. Specifically, a data signal is produced by the linear image sensor as the linear image sensor reads the array of dots. Then, this data signal is decoded into a programming script. An important point to note here is that no "external" reference is needed to obtain the programming script. For example, there is no need to refer to a look-up table or database to obtain the programming script. The programming script is obtained solely from the array of dots. Essentially, the array of dots printed on the card can be considered as the programming script written on the card in an alphabet or language foreign to or unreadable by humans.

In contrast, the bar code of Yamaki et al. does not represent a programming script. Rather, the bar code represents an identifier, such as "OCR" or "Binarized" or "Dither". The bar code of Yamaki et al. does not store a script (i.e. programming instructions). Put differently, if given the data signal that is obtained by the linear scanner after scanning the bar code, one could not decode a programming script from this data signal.

As described, for example in paragraph 16 of Yamaki et al., the system of Yamaki et al. first reads the bar code to obtain the identifier. Upon recognizing the identifier (for example, "OCR"), the system then performs OCR scanning on the sheet of paper. An important point to note is firstly that the identifier of "OCR" is not a programming script, and secondly that

the bar code does not contain a script for performing "OCR". The script for performing "OCR" is built into the scanner itself or defined via a scanner driver, separate from the bar code. It therefore cannot be said that the bar code of Yamaki et al. represents a programming script.

Applicant respectfully submits that the combination of Yamaki et al. with Petit et al. and Fellegara et al. does not arrive at the device of claim 1, in which an array of dots printed on a card represents a programming script, the array of dots are transformed into a data signal by a linear image sensor, and a microcontroller decodes the data signal into the programming script.

For the reasons as given above, Applicant respectfully submits that independent claim 1, and the claims dependent therefrom, are novel and inventive.

The Examiner's further consideration of the claims is earnestly sought. Applicant thanks the Examiner in advance for his further consideration, and looks forward to word of official communication in due course.

Very respectfully,

Kia Silverbrook, Managing Director

Silverbrook Research Pty Ltd
393 Darling Street
Balmain NSW 2041, Australia

Email: pair@silverbrookresearch.com
Telephone: +612 9818 6633
Facsimile: +61 2 9555 7762